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	THE RELATION	ONSHIP OF	
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NRO review(s) completed.

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## I. Introduction

## Authority

This study was requested by the Director of Central Intelligence.

#### Purpose

To establish: the relationship of mapping, charting, and geodesy to intelligence; the degree of need for overhead photography as an input for mapping, charting, and geodesy; the procedures for meeting the mapping and charting need at a reasonable rate, and the costs associated therewith.

# II. Conclusions and Recommendations

Conclusion 1. Accuracy requirements constitute a major factor in determining the suitability of satellite photography for specific MC&G purposes. In the past, new accuracy requirements have been approved without sufficient attention being given to the possible impact of such approval on collection resources. This problem can be resolved by:

- a. Prior to approving any more stringent MC&G accuracy criteria the USIB require a thorough analysis to determine whether or not such criteria can be met within the capability of the existing systems; and
- b. The USIB's establishing a policy that whenever more demanding accuracy criteria are requested to meet military operational needs, programs to meet such criteria be justified on a military operational basis and the USIB not commit itself as the approving authority.

NOTE: The above procedures would replace the present practice by which USIB approves more demanding criteria and such approval is used subsequently as justification for the development of new and costly collection	25X 25X
systems.	20/
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Recommendation 1
That the DCI/USIB adopt a. above for those criteria aimed at intelligence objectives and b. for those accuracy criteria which are of a military operational nature.
Conclusion 2. The justification for the high volume of collection now underway and projected for the future is based upon the understandable desire of the MC&G community to be able to respond rapidly in emergencies to commanders' needs for map coverage of areas for which adequate maps are not already available. Rapid response requires that photography suitable for MC&G purposes be collected and maintained on an up-to-date basis for extensive areas of the world for which maps of suitable quality do not now exist. Although this ''data bank'' concept is a reasonable one, its fulfillment can lead to an excessive diversion of resources. Careful monitoring is therefore needed, both as to the extent of area to be covered by photography, and as to the necessity and timing of recoverage. Two possible actions could be taken to assist in this regard:
a. The DCI can point out to the DOD that the demands for photographic coverage for MC&G purposes of a considerable portion of the world are based upon the data bank concept with responsiveness to the JSOP being the controlling factor and that any action which could more precisely limit the areas of possible emergency need would result in collection as well as processing and storage
savings.
b. The Chairman, USIB, can require COMIREX to review carefully requests for recoverage of areas for MC&G purposes, to ensure that such requests reflect a critical need rather than a "useful to have" concept.
Recommendation 2
Approval of a. and b. above.
Conclusion 3. The actual cost of producing satellite photography for the MC&G program is not now fully identifiable because:

- a. A system has not been devised for identifying all of the developmental and programming actions which are primarily in support of MC&G.
- b. An accounting system has not been established to allocate the cost that should be charged to MC&G for its proportion of the coverage provided on each satellite mission.
- c. The "free ride" philosophy which has generally been associated with the collection of satellite photography for MC&G purposes has contributed to the omission of any systematic accounting of the costs attributable thereto.
- d. There may have been some logic in the "free ride" approach in the past, but now, because of the sharper focus of attention on the intelligence budget, it is desirable that a specific cost accounting procedure be established. To reflect realism in the costing procedure, it must be recognized that both the S/I camera system and the primary camera system collect photography that is used for MC&G purposes. In order to take account of the two systems in arriving at a reasonable cost allocation, the cost of the S/I camera system could be subtracted from the total mission cost. Each of the subtotals could then be subjected to the following criteria: Determine the percentage of the total film supply of each camera system that was expended for the satisfaction of MC&G requirements. The collection cost for MC&G could then be determined on the basis of the appropriate percentage slice of the mission cost of each of the two systems. Additionally, the cost of film exposed solely for MC&G purposes and that associated with the production of dupes or prints for MC&G should also be allocated to the MC&G community.

#### Recommendation 3

1. That the DOD and the NRO be asked to identify clearly those programs in the research and development area and the costs associated therewith which are for MC&G purposes.

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omati	ons. The resources chargeable to the operational aspects
	program should then be considered as non-add items in
	insofar as the intelligence aspects of that program are
concerr	ned.
. (2	2) Request the TOD group to develop reporting guidance
which w	would distinguish between the intelligence and the opera-
tional a	aspects of the MC&G budget line items in the CIP.
•======================================	
Conclus	sion 5. Photography, particularly satellite photography,
donorda en o	essential input to the mapping, charting, and geodesy pro-
provides an e	ill and a shot the mapping, charting, and goodesy pro-
gram, and wi	ill undoubtedly continue to do so. In view of the growing
needs for hig	hly accurate maps and the improvements now being made
	ble in the future in photographic products, the demand for
contributions	by photography will increase.
Recommenda	tion 5
None.	
	·
Recommenda	tion 6
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That NI	RO maintain a careful record of the photography and services
	civilian agencies, with a view to developing, at an appro-
priate time,	a system of allocating costs to such agencies.
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. Guidanc		
The gu mit it to, th	dance given for the conduct of the study inc ne following major points:	cluded, but did not
	. To what degree is the worldwide mappin m an intelligence requirement?	g and charting
	. Are the photographic inputs to this prog	ram essential
at a ra	. Is photographic coverage for this purpos te which is compatible with productive utili	se being produced zation?
Conduct of the	ne Study	
geodesy con	ur basic functions associated with mapping sidered by this study are: Establishment oution, and Production.	, charting, and f Requirements,
government of Interior, and NASA, who do with as	cus of the study is on the DOD MC&G progragencies, such as the Geological Survey of which have an assigned mission to produce which is in the early stages of developing casessments of earth resources through over not considered in full detail as their prograge.	maps and charts, apabilities having rhead reconnais- ms are either
complement programs of is not yet cl the Scientifi	ary to, or do not have an important impact the DOD. The course which the NASA properties. The study group, operating unchanged to the President, is considering atography for earth resources studies.	ogram will follow der the aegis of
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## 8. Mechanisms Available to the DCI for Monitoring the MC&G Effort.

a. <u>USIB-COMIREX</u>. Satellite photography collection requirements in support of mapping, charting, and geodesy needs enter the USIB structure through the MC&G Working Group of COMIREX. This Working Group is chaired by DIA with representatives of the Army, Navy, Air Force, CIA, and NSA serving as members. Because most of the requirements are in support of military operations, they usually have been accepted in the past without stringent validation procedures. Requirements forwarded to COMIREX by the Working Group are scrutinized primarily from the standpoint of possible impact on priority intelligence targets rather than from a validity standpoint. They are generally accepted as supporting the needs of the military departments. In some cases, however, the

USIB channel is not followed.

- b. Participation in Review of the NRP. Within the NRP, the DCI, as a member of the executive committee, expresses himself as a monitor of the NRP budget and of the procurement of hardware in support of collection requirements. At times documents are received from the NRO which lack sufficient detail for close examination. The budget is not broken down in a manner in which MC&G costs can be easily identified and evaluated. In addition, a response is often requested within a time frame that does not permit a detailed examination to be made and a position to be properly staffed and presented. Under these circumstances the DCI is placed in a position of making judgments involving large sums of money without adequate opportunity for the evaluation of the information.
- c. Participation in Review of the CIP. The Consolidated Intelligence Program of the DOD is a principal arena in which the mapping, charting, and geodesy resource requirements are spelled out in considerable detail. This programmatic presentation, which

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includes related data on costs and manpower, encompasses most of the major aspects of the military resources devoted to MC&G. For fiscal 1969, this proposed program amounts to

and is exclusive of NRP

costs for MC&G. The review process for the CIP takes place within the Defense Department; the DCI is represented in the review by a member of the NIPE Staff. The DCI has further opportunity to comment on the CIP directly to the Secretary of Defense, who is the recipient of the CIP Review Group recommendations, to the extent he may desire. The problem that arises in regard to making comments on the MC&G area is that, while it is presented as an intelligence program, the proposals are predominantly a reflection of military operational requirements. Furthermore, except for the once-a-year activity of the CIP Review Group, there has been no vehicle through which the DCI can evaluate the contributions that the varied and complex systems and programs make to the overall MC&G effort, or where the CIP and NRP programs can be interrelated. For these reasons, the DCI representative on the CIP Review Group can have only an instinctive feel for the appropriateness of the MC&G line item in the CIP.

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